

We claim:

1. A kit for amplifying a target nucleic acid, said kit comprising:
 - a. a container comprising a source of phosphate ions and a container comprising a source of magnesium ions, wherein combining the source of magnesium ions and the source of phosphate ions form a precipitate at a temperature below 34°C; and
 - b. instructions for using the source of phosphate ions and the source of magnesium ions in amplification of the target nucleic acid.
2. The kit of claim 1 wherein the source of phosphate ions is phosphoric acid and the source of magnesium ions is magnesium chloride.
3. The kit of claim 2 wherein said kit further comprises a container comprising a DNA polymerase.
4. The kit of claim 3 wherein the DNA polymerase is TaqLA, Klentaql, KlentaqLA, Pfu, Deep Vent or Tth.
5. The kit of claim 4 wherein said kit further comprises a container comprising deoxyribonucleoside triphosphates.
6. The kit of claim 2 wherein said kit further comprises a container comprising a mixture of at least two DNA polymerases selected from the group consisting of TaqLA, Klentaql, KlentaqLA, Pfu, Deep Vent and Tth.
7. The kit of claim 6 wherein said kit further comprises a container comprising deoxyribonucleoside triphosphates.
8. A kit for amplifying a target nucleic acid, said kit comprising:

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- a. a container comprising a reagent comprising a precipitate comprising a magnesium salt; and
 - b. instructions for using the precipitate to amplify the target nucleic acid.
9. The kit of claim 8 wherein said kit further comprises a DNA polymerase.
 10. The kit of claim 9 wherein said DNA polymerase is TaqLA, Klentaq1, KlentaqLA, Pfu, Deep Vent or Tth.
 11. The kit of claim 9 wherein said kit further comprises a container comprising deoxyribonucleoside triphosphates.
 12. The kit of claim 8 wherein said kit further comprises a container comprising a mixture of at least two DNA polymerases selected from the group consisting of TaqLA, Klentaq1, KlentaqLA, Pfu, Deep Vent and Tth.
 13. The kit of claim 12 wherein said kit further comprises a container comprising deoxyribonucleoside triphosphates.
 14. A kit for amplifying a target nucleic acid, said kit comprising instructions for using a source of phosphate ions and a source of magnesium ions in amplification of a target nucleic acid.